Matrix Grid I/O Board
Series 480

The ideal expansion of connectivity for your Matrix Grid installation

Matrix Grid I/O Board

**Matrix Grid I/O Board Features**

**Reduction in Cabling**
The use of the Grid I/O boards significantly reduces the cabling effort between Draco tera enterprise matrices. Instead of single Grid lines for each interconnection, using standard I/O boards, the specific Grid board ensures to handle up to 8 Grid lines via one 10G fiber connection (XV: 4 Grid lines).

**Site Connection**
Based on Ethernet layer 2 standard, the Grid I/O board offers a wide range of connectivity in combining Draco tera matrix switches, even if located far from each other in different sites. Connecting the boards directly ensures a distance of up to 1.4 or 10 km (SFP dependant), but using access to a carrier network of 3rd party hardware (e.g. 10G network switches and repeaters) allows you to connect matrices that can be hundreds of kilometers apart.

**Cost Efficiency**
By reducing the number of required cables for matrix interconnection, this at the same time comes a long with a reduction of cabling costs and efforts. Compared to a CWDM solution that is the conventional method of reducing the number of cables, the Grid I/O board also saves considerable cost.

**Flexible Setup**
In a setup based on two matrices, the Grid I/O boards can be directly connected via one fiber port. But when having multiple matrices, the use of the 2nd fiber port on each board allows you to setup a ring topology with 4 Grid connections on each port. This means that each matrix will have to be connected to two other matrices.

**Easy Configuration**
For the use of the Matrix Grid I/O boards, there is no need for a specific configuration in the firmware, but only an existing Matrix Grid. At the same time this allows an easy expansion of existing installations with hardly any configuration efforts.

* Some of the mentioned features will be part of future firmware updates.

**Product Data**
- 2x SFP based LC duplex fiber connectors (10G Bandwidth)
- Distances of up to 1.4 km or 10 km in a direct connection
- Ethernet Layer 2 support
- Compatible to firmware V03.03 or higher
Draco tera enterprise
Series 480

Grid I/O Board

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Input and Output Interface</th>
<th>Fiber (LC duplex)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance per connection (max.)</td>
<td>Single-Mode (9µ) 1.4 km or 10 km (SFP dependent)</td>
</tr>
<tr>
<td>Requirement</td>
<td>Already configured matrix grid</td>
</tr>
</tbody>
</table>

SETUP POSSIBILITIES

Direct topology

Ring topology

IHSE Matrix Grid technology enables worldwide KVM site connection over Ethernet (WAN) infrastructure:

PRODUCT RANGE

<table>
<thead>
<tr>
<th>Product</th>
<th>Data Transmission</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draco tera enterprise Grid, 8 to 1 port I/O modul, fiber (up to 1.4 km, 10 km upon request), 10G, incl. 1x 459-10S10</td>
<td></td>
<td>480-GRD-S8R1</td>
</tr>
<tr>
<td>SFP single-mode, LC duplex, bidirectional, 10G, MSA, 10 km</td>
<td></td>
<td>459-10S10</td>
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